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Implications of China's exchange rate policy have a wide reach

International criticism concerning China's exchange rate policy has again increased, following China's determination to stick to maintaining the renminbi's dollar peg despite the country's accelerated economic growth. In recent years, global discussion on the undervaluation of the renminbi has been fuelled in particular by many countries' large trade deficits with China and China's ballooning current account surplus. In general, China is reproached for supporting its own export industry by maintaining a weak currency, and an appreciation of the renminbi would most likely alleviate imbalances in the world economy. However, such discussions often fail to recognise that the consequences from the renminbi's fluctuations spread into the world economy in a number of ways. The implications have a much wider reach than only for China's bilateral trade with, for example, the United States and the EU countries.

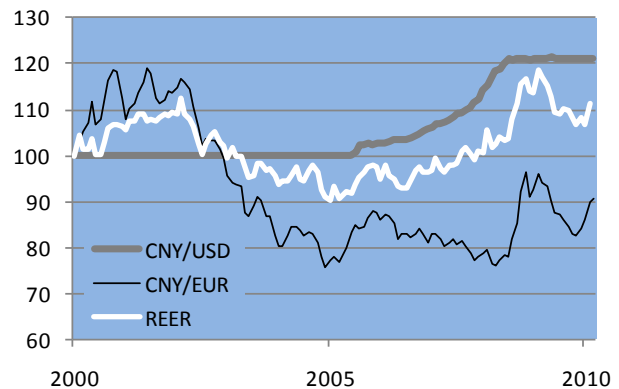
Chinese currency undervalued

A number of surveys point to an apparent undervaluation of the exchange rate of the Chinese currency, even though estimates of the undervaluation differ considerably (see [Focus/Opinion 4/2010](#)). The undervaluation has been the result of the renminbi's fixed dollar peg, as productivity growth in China has been clearly faster than in the United States.

China anchored the renminbi to the dollar in 1994 as part of extensive economic reforms. Partly as a consequence of international pressure, the renminbi was revalued by 2.1% against the dollar in summer 2005 (Chart 1). The renminbi was subsequently allowed to strengthen gradually by about a fifth relative to the dollar, by summer 2008. At the same time, China's competitiveness also weakened slightly, as the real effective exchange rate (REER) appreciated to its 2001 level.

Even so, China decided to return to the tight dollar peg in summer 2008, when the onset of the international financial crisis substantially weakened the outlook for exports and the domestic market needed a stimulus because of a slowdown in the real estate sector. Although the first reactions to the re-introduction of the peg were mainly positive on account of the stability it brought to the region, the undervaluation of the renminbi has again been highlighted following a rapid rebound in China's economic growth.

Chart 1. Renminbi to dollar and renminbi to euro exchange rates, real effective exchange rate



Source: CEIC

Internal discussions within China on exchange rate policy have been rightly boosted by high inflation and signs of a repeated overheating of the property market. In China, the government decides on monetary policy and, accordingly, on the exchange rate. The central bank mainly has an executive role to play in this context. In China's internal discussion, parties closest to the government, such as the National Development and Reform Commission (NDRC), have taken a much more indifferent stance towards a revision of the exchange rate regime than the central bank and academics.

Exchange rate adjustment alone would not absorb trade surplus

China's exports began to react strongly to fluctuations in world demand following the country's accession to the WTO in late 2001. After removal of trade barriers, China has won market shares, as its exports have grown markedly faster than world trade. As evidenced by our study, GDP growth of 1% in the United States or EU countries increases China's exports to these countries by as much as 10%.¹ Large demand elasticity helps explain why, for example, China's exports to the EU contracted by about a fifth last year.

In addition, the exchange rate plays a significant role in Chinese trade. There is evidence showing that renminbi appreciation, ie an elevation of the prices of

¹Based on the study: Garcia-Herrero and Koivu (2008): China's Exchange Rate Policy and Asian Trade, *Economie Internationale* 116, p. 53-92. Updated version published on 15 April 2010 in the e-book of VoxEU and CEPR The US-Sino Currency Dispute: New Insights from Economics, Politics, and Law Ed by Simon S. Evenett. <http://www.voxeu.org/index.php?q=node/4868>

Chinese export products in terms of other currencies reduces China's exports. By contrast, as regards imports, China's case is exceptional. As the strengthening of a country's currency normally increases imports, the effect in the case of China is to the opposite. Thus, a possible revaluation-induced correction in China's trade surplus would remain relatively limited.

Our study reveals that an appreciation of the renminbi leads to a contraction in imports from other East Asian countries, in particular. As outlined in the study, this is due to the fact that a major part of China's imports consists of goods and raw materials, needed by the country's export sector, which are first directed for processing by Chinese assembly plants and finally redirected to retailers' shelves outside Chinese borders. Consequently, the strengthening of the currency, which scales back exports, also reduces demand for parts, components and capital goods by the export sector. For this reason, the effects of weaker competitiveness caused by renminbi appreciation spread, besides China, to many other East Asian economies, which deliver parts and components to Chinese factories.

The value added remaining in China in connection with the manufacture of electronics export products, in particular, may be very limited. Extreme examples of this are perhaps most technically advanced state-of-the-art products. US researchers have reckoned that, for instance, the manufacture of an iPod equipment costing USD 150.00 to the consumer generates a mere USD 4.00 worth of value added in China, because almost all the necessary components and the related research and development work, as well as marketing and distribution, are manufactured or undertaken by other countries.² In examining the manufacture of Nokia's recent cell phone models, Finnish researchers have also come to similar conclusions.³

East Asian countries in the same boat

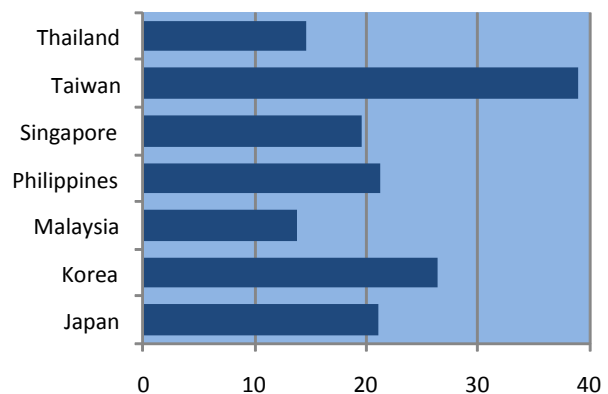
These observations have also been reflected in international debate so that comments made by emerging economies in respect of China's exchange rate policy have been few. This is likely to be explained in part by the benefits that especially raw material producers have reaped from China's ongoing rapid growth during the global economic crisis.

² Koopman, Robert, Zhi Wang, and Shang-Jin Wei (2008) "How Much of Chinese Exports is Really Made In China? Assessing Domestic Value-Added When Processing Trade is Pervasive" [NBER Working Paper 14109](#).

³ Jyrki Ali-Yrkkö (Ed.): *Nokia and Finland in a Sea of Change*, Research Institute of the Finnish Economy ETLA, B:244, 2010.

East Asian countries, in turn, are aware of their interests being largely convergent with China's. With production chains becoming increasingly international, the competitiveness of a chain is determined by the sum of its parts; so, maintenance of Chinese price competitiveness is in the interests of the whole chain. The implications of a stronger renminbi will have a wide reach across East Asian countries. The effects may be even substantial, as the Chinese processing sector has become the main destination for the exports of many East Asian countries (Chart 2). According to our study, there is no certainty that an appreciation of the renminbi would encourage East Asian countries to avoid Chinese factories and export their products direct to end-product markets.

Chart 2. Share of exports to China and Hong Kong of the total exports of East Asian countries in 2008, %



Source: IMF Direction of Trade Statistics

Emerging economies located elsewhere but in East Asia are more loosely linked with production chains ending in China, and their competitive position is therefore different. This has become particularly evident in the last few weeks, when Brazil and India have joined the United States and required a revaluation of the renminbi. In any case, China's rapidly increased role in the world economy means that the implications of the country's decisions will be reflected in most other world economies, in one way or another.

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